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Listing of Claims:

1. (Currently Amended) An instrumentation receiver of the type that converts a wideband RF signal to a wideband IF signal comprising:

a wideband IF channel having the wideband IF signal as an input to provide wideband signal acquisition data; and

a narrowband IF channel ~~having comprising the wideband IF signal as an input simultaneously with the wideband IF channel to provide high dynamic range signal data~~ a frequency offsetting conversion stage having the wideband IF signal as an input to offset the frequency by a variable amount;

a narrowband filter, filtering the frequency offset wideband IF signal to produce a narrowband IF signal offset within the original wideband IF signal; and

an analog to digital converter sampling the narrowband IF signal at a relatively slow sample rate with a high resolution to provide the high dynamic range signal data for a frequency trigger function.

2. (Canceled)

✓ 3. (Currently Amended) The receiver as recited in claims 1 ~~or 2~~ wherein the wideband IF channel comprises means for sampling the wideband IF signal at a high sample rate with a relatively low resolution to provide the wideband signal acquisition.

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- 3/ 4. (Original) The receiver as recited in claim ² wherein the wideband IF channel further comprises an anti-aliasing filter having the wideband IF signal as an input and providing an anti-aliased wideband IF signal as input to the sampling means.
- 4/ 5. (Original) A method of processing a wideband signal to provide high dynamic range sampled data for use in a frequency trigger function comprising the steps of:
- inputting the wideband signal to both a narrowband channel and a wideband channel simultaneously;
 - sampling the wideband signal output from the wideband channel at a high sample rate with a relatively low resolution to provide wideband signal acquisition data;
 - varying a frequency offset in the narrowband channel to cover a desired subsection of the wideband signal;
 - narrowband filtering the frequency offset wideband signal to provide a narrowband signal from the wideband signal; and
 - sampling the narrowband signal output from the narrowband channel at a relatively low sample rate with a high resolution to provide the high dynamic range sampled data.